

WHAT IS CLAIMED IS:

1. An optical alignment mount for adjusting a height of an optical component relative to a substrate comprising:

- a component mount adapted to receive an optical component, the component mount having a pivot surface; and
- a pivot support configured to engage the pivot surface of the component mount to change the height of the optical component relative to the substrate.

2. The optical alignment mount of claim 1 wherein the pivot support includes a socket.

3. The optical alignment mount of claim 2 wherein the socket comprises a v-groove.

4. The optical alignment mount of claim 3 wherein the component mount includes a cylindrically shaped pivot surface.

5. The optical alignment mount of claim 2 wherein the socket comprises a hole.

6. The optical alignment mount of claim 5 wherein the component mount includes a spherical pivot surface.

7. The optical alignment mount of claim 6 wherein the hole is chamfered.

8. The optical alignment mount of claim 1 including a bonding material to fixedly secure the component mount to the pivot support.

9. The optical alignment mount of claim 8 wherein the bonding material comprises an adhesive.

10. The optical alignment mount of claim 9 wherein the bonding material comprises solder.

11. The optical alignment mount of claim 1 wherein the component mount is welded to the pivot support.

12. The optical alignment mount of claim 1 wherein the light which interacts with the optical component is directed generally parallel to a plane of the substrate.

13. The optical alignment mount of claim 12 wherein the light couples to another optical component mounted to the substrate.

14. An optical alignment mount for adjusting a height of an optical component relative to a substrate comprising:

an optical component mount with a curved pivot surface and adapted to receive an optical component, the center of curvature of the pivot surface defining a pivot point; and

a pivot support adapted to engage the pivot surface of the optical component mount to change the height of the optical component relative to the substrate.

15. The optical alignment mount of claim 14 wherein the optical component is offset from the pivot point.

16. The optical alignment mount of claim 14 wherein the curved pivot surface is cylindrically shaped.

17. The optical alignment mount of claim 14 wherein the curved pivot surface is spherically shaped.

18. The optical alignment mount of claim 14 wherein the pivot support includes a socket.

19. The optical alignment mount of claim 17 wherein the socket comprises v-groove.

20. The optical alignment mount of claim 17 wherein the socket comprises a hole.

21. The optical alignment mount of claim 14 including a bonding material, the bonding material fixedly securing the optical component mount to the pivot support.

22. The optical alignment mount of claim 20 wherein the bonding material comprises an adhesive.

23. The optical alignment mount of claim 20 wherein the bonding material comprises solder.

24. The optical alignment mount of claim 14 wherein the optical component mount is fixedly secured to the pivot support.

25. The optical alignment mount of claim 14 wherein the light which interacts with the optical component is directed generally parallel to a plane of the substrate.

26. The optical alignment mount of claim 25 wherein the light couples to another optical component mounted to the substrate.

27. An optical alignment mount for adjusting a height of an optical component relative to a substrate comprising:

an optical component mount adapted to receive an optical component and further having a socket; and

a pivot support with a curved pivot surface configured to engage the socket of the optical component mount to change the height of the optical component relative to the substrate.

28. A method of adjusting a height of an optical component relative to a substrate comprising:

obtaining an optical component mount adapted to receive an optical component;

placing the optical component mount in a pivot support;

pivoting the optical component mount in the pivot support to change the height of the optical component relative to the substrate.

29. The method of claim 28 wherein the optical component mount has a spherical surface.

30. The method of claim 28 including fixing the optical component mount to fix the optical component at a desired height.

31. The method of claim 30 wherein fixing comprising bonding.

32. The method of claim 28 wherein the light which interacts with the optical component is directed generally parallel to a plane of the substrate.

33. The method of claim 32 wherein the light couples to another optical component mounted to the substrate.